

### REMARKS

Claim 8 has been amended to incorporate the limitations of claim 9. Claims 8, 16, 17 and 20 have been amended to clarify that the display provides indication(s) that insufficient change may be available "from the machine."

Claims 8, 10-20, 25 and 27-32 are pending.

The claims were rejected over various references each of which is discussed below. Applicant urges the Examiner to consider carefully the limitations recited in each of the claims. As explained below, there are significant differences between the claimed subject matter and the cited references. There is simply no suggestion—as required under 35 U.S.C. 103—for modifying any of the references to obtain the claimed subject matter, and the Office action does not point to any such suggestion(s).

#### The Claims are Patentable over the Morun Patent

Claims 8-20, 25 and 27-32 were rejected as unpatentable over the Morun patent. As discussed below, applicant respectfully disagrees.

(1) Claim 8 recites, in part, a vending machine having display means to give first and second indications "that insufficient change may be available from the machine" where each indication is produced "in response to the detection of a respective set of conditions." The Morun patent simply does not disclose or suggest those features.

The Morun patent discloses two display indications: (i) During a "force vend mode," when a customer deposits a high value, non-tubed coin and attempts to have change returned before making an item selection, the display instructs the customer to make a selection or to deposit more money to increase the credit value toward the purchase price of a vend item (col. 11, lines 3-10); and (ii) A display instructing customers to deposit lower denomination coins first to increase the probability of accepting non-tubed high value coins (col. 12, lines 16-20).

Even if the instruction described at col. 11 were considered to satisfy one of the "indications," the display disclosed at col. 12 of the Morun patent is not an indication that

“insufficient change may be available to a customer” as recited in claim 8. Furthermore, even if it were, that display is not produced “in response to the detection of a . . . set of conditions” as recited in claim 8. Instead, as disclosed in the Morun patent, the second display would constantly appear on the front panel of the vending machine. Therefore, there is no disclosure or suggestion of the two specific display indications as recited in claim 8. Accordingly, claim 8, as well as dependent claims 10-15, is patentably distinguishable from the Morun patent.

(2) Claims 16 and 17 also recite a display means to provide first and second indications that are subject to particular conditions. For example, claim 16 recites a display means “to provide a first indication when the amount of available change from the machine is less than the value of the highest-denomination coin storable in the second store, and a second indication when the amount of the received payment exceeds the available change by more than a predetermined allowable overpay amount.” Similarly, claim 17 recites “display means to provide a first indication when the amount of available change from the machine is less than the value of the highest-denomination coin storable in the second store, and a second indication when the difference between a credit value and a vend price exceeds the available change by more than a predetermined allowable overpay amount.”

As discussed above, the Morun patent does not disclose or suggest a second display indication that is subject to any conditions, let alone the particular conditions recited in claims 16 or 17. Therefore, claims 16 and 17, as well as dependent claims 18-19, are patentably distinguishable from the Morun patent.

(iii) Claim 20 recites, in part, a vending machine that is operable “to inhibit the vend” under specified circumstances and that the machine is operable “in these circumstances” to cause the display means to provide an indication “that insufficient change may be available from the machine.”

Applicant acknowledges that FIG. 9 of the Morun patent indicates that a vend may be blocked. Specifically, if, based on the credit value and the vend price, change is unavailable, then the vend is blocked. However, there is absolutely no suggestion that, “in these circumstances,” the display provides an indication “that insufficient change is available.”

Although the “force vend” mode described at col. 11, lines 3-10 of the Morun patent provides instructions to the customer via a display, it is clear that those instructions are not provided under the circumstance of a vend being inhibited as recited in claim 20. To the contrary, those instructions are provided under completely different circumstances before the customer even selects an item to be vended:

A “force vend” mode of a vending machine is utilized in situations where a customer edposits a high-value, non-tubed coin and attempts to have change returned before making an item selection. . . .

(Col. 11, lines 3-6) (Underscoring added) Therefore, the “force vend” mode disclosed in the Morun patent is completely irrelevant to claim 20.

In view of the foregoing remarks, it is clear that the Morun patent neither disclosures nor suggests the subject matter of claim 20

(iv) Claim 25 recites, in part, a vending machine operable to “prevent acceptance of a monetary unit” and having display means to provide an indication to a customer “in response to receipt of a monetary unit which is so prevented from being accepted.”

The Morun patent discloses that if change cannot be made for possible selection at an item price, then acceptance of that non-tubed coin is disabled (*see e.g.*, col. 11, lines 45-47). Although that patent discloses preventing acceptance of a monetary unit under certain conditions, there is simply no disclosure or suggestion that anything is displayed to the customer “in response” to receipt of money which is prevented from being accepted. Therefore, claim 25, as well as dependent claims 27 and 28, is patentably distonguishable from the Morun patent.

(v) Claim 29 recites, in part, a vending machine that includes means for providing a warning indication “prior to initiating a transaction if the avialable change meets a predetermined criteria and if the allowable overpay amount is non-zero.” Thus, the warning indication is provided before initiating a transaction and is subject to the the specified conditions.

As discussed above, the Morun patent discloses two display indications. Neither of those satisfies the limitations of claim 29. As explained in the Morun patent, a customer “may initiate a transaction by depositing coins or bills of particular denominations in the slots 50 or 60,

respectively.” (Col. 3, lines 45-47) However, the instructions provided on the display during the “force vend” mode (col. 11, lines 3-10) occur only after a transaction is initiated (i.e., after a customer deposits a high-value, non-tubed coin and attempts to have change returned), not prior to initiating a transaction as recited in claim 29.

Furthermore, the instructions on the display mentioned at col. 12, lines 16-20 of the Morun patent are not subject to any conditions; therefore, there is no display that is prior to initiating a transaction and that satisfies the claim language “means for providing a warning indication . . . if . . . and if . . .”

In view of the foregoing remarks, it is clear that there is simply no suggestion of the subject matter of claim 29 or dependent claims 30-32.

The Claims are Patentable over the Tedesco Patent

Claims 8-10, 12, 14-18, 20 and 29 were rejected as unpatentable over the Tedesco patent. As discussed below, applicant respectfully disagrees.

(i) Claim 8 recites a vending machine having a display means to give first and second indications “that insufficient change may be available from the machine.”

The Tedesco patent discloses a display 124 for displaying a message indicating that an entered subscription identifier is invalid (col. 7, lines 57-58; step 814) and for displaying a message indicating that a received payment is insufficient (col. 7, lines 63-66). Neither of those messages are indications that “insufficient change may be available from the machine . . .” as recited in claim 8. Therefore, claim 8, as well as dependent claims 10, 12 and 14-15, is patentably distinguishable from the Tedesco patent.

(ii) Claims 16 and 17 recite vending machines having display means to provide an indication when the amount of available change from the machine is less than a certain level. Specifically, those claims recite a display means to provide an indication “when the amount of available change from the machine is less than the value of the highest-denomination coin” in a store.

As explained above, the Tedesco patent discloses the display of messages relating to the validity of a subscription identifier and relating to the sufficiency of received payment. There is absolutely no disclosure or suggestion in the Tedesco patent relating to the display of an indication when the amount of available change is less than a particular value. Therefore, claims 16 and 17 are patentably distinguishable from the Tedesco patent.

(iii) Claim 20 recites, in part, a vending machine having a display means to provide an indication that "insufficient change is available from the machine." As already discussed above, the display disclosed in the Tedesco patent does not provide such an indication and there is no suggestion that it should do so. At least for that reason, claim 20 is patentably distinguishable from the Tedesco patent.

(iv) Claim 29 recites, in part, a means for providing a warning indication "prior to initiating a transaction . . ."

In contrast, according to the Tedesco patent, the messages appear on the display only after the transaction is initiated. In other words, the information displayed in blocks 814 and 822 (FIG. 8A) is part of the subscription request validation process 716 which occurs after payment has been received in step 712. Therefore, at least for that reason, there is no disclosure or suggestion of the subject matter of claim 29, or dependent claims 30-32, in the Tedesco patent.

#### The Claims are Patentable over the Ramsey Patent

Claims 8-10, 12, 14-18, 20 and 29 were rejected as unpatentable over the Ramsey patent. As discussed below, applicant respectfully disagrees.

(i) Claim 8 recites a vending machine having a display means to give first and second indications "that insufficient change may be available from the machine."

The Ramsey patent discloses a fuel dispenser 35 which displays sales indicia such as fuel price and fuel quantity units (col. 6, lines 1-5). A video display 57 can provide "additional fueling instructions or other important information about products for sale, or locations of interest to the purchaser." (Col. 6, lines 32-36) That patent also discloses the ability to calculate

and dispense change to the purchaser (*see e.g.*, col. 13, lines 40-41). However, there is no disclosure or suggestion of a display that provides an indication regarding the availability of insufficient change from the machine as recited in claim 8. Therefore, at least for that reason, claim 8, as well as dependent claims 10, 12, 14 and 15, is patentably distinguishable from the Ramsey patent.

(ii) Claims 16 and 17 recite vending machines having display means to provide an indication when the amount of available change from the machine is less than a certain level. Specifically, those claims recite a display means to provide an indication “when the amount of available change from the machine is less than the value of the highest-denomination coin” in a store.

As explained above, the Ramsey patent discloses a fuel dispenser 35 which displays sales indicia and a video display 57 which provides fueling instructions and information about products for sale and locations of interest. There is absolutely no disclosure or suggestion in the Ramsey patent relating to the display of an indication when the amount of available change from the machine is less than a particular value. Therefore, claims 16 and 17 are patentably distinguishable from the Ramsey patent.

(iii) Claim 20 recites, in part, a vending machine having a display means to provide an indication that “insufficient change is available from the machine.” As already discussed above, the display disclosed in the Ramsey patent does not provide such an indication and there is no suggestion that it should do so. At least for that reason, claim 20 is patentably distinguishable from the Ramsey patent.

(iv) Claim 29 recites, in part, a means for providing a “warning indication.”

As noted above, the Ramsey patent discloses a fuel dispenser 35 which displays sales indicia and a video display 57 which provides fueling instructions and information about products for sale and locations of interest. None of the displayed information is a “warning indication,” and there is no suggestion in the Ramsey patent of displaying such an indication. At

least for that reason, claim 29, as well as dependent claims 30-32, are patentably distinguishable from the Ramsey patent.

The Claims are Patentable over the Walker Patent

Claims 8-20, 25 and 27-32 were rejected as unpatentable over the Walker patent. As discussed below, applicant respectfully disagrees.

(i) Claim 8 recites, in part, a vending machine having display means to give first and second indications “that insufficient change may be available from the machine.” The Walker patent simply does not disclose or suggest those features.

The Walker patent disclose displaying text or graphics that explain to the customer or cashier that an upsell item (*i.e.*, a selected product at a higher price) may be purchased in exchange for a specified amount of change due to the customer. As explained by the Walker patent, the display is intended to reduce the time a cashier spends processing a purchase by reducing the amount of change due to customers. The display also is intended to increase the amount of sales. (Col. 1, line 34 – col. 2, line 2) Such a display, however, is not an indication that “insufficient change may be available from the machine” as recited in claim 8. Therefore, claim 8, as well as dependent claims 10-15, is patentably distinguishable from the Walker patent.

(ii) Claims 16 and 17 recite, in part, a vending machine operable to store received payments in a first store from which payments may be dispensed or a second store from which payments may not be dispensed. The vending machine has display means to provide a first indication “when the amount of available change from the machine is less than the value of the highest-denomination coin storable in the second store.” There is nothing in the Walker patent that discloses or suggests that feature or the subject matter of claims 16 and 17. The display of upsell information in exchange for a specified amount of change due to the customer has nothing to do with whether the amount of available change from the machine is less than the value of the highest-denomination coin storable in the second store (*i.e.*, the store that does not permit

subsequent dispensing of payments). Therefore, at least for that reason, claims 16 and 17 are patentably distinguishable from the Walker patent.

(iii) Claim 20 recites, in part, a vending machine operable "to inhibit the vend" under certain circumstances and operable "in these circumstances" to cause a display means to provide an indication that "insufficient change may be available from the machine."

Contrary to the statement in the Office action at page 7, par. 2, there is no disclosure in the Walker patent of inhibiting a vend. The Office action points to col. 6, lines 31-44 as suggesting inhibiting a requested vend. That is incorrect. That section of the Walker patent relates to determining an upsell item and providing a text or graphics on the display to identify the upsell item to the customer or cashier. Nothing in that section or elsewhere in the Walker patent discloses or suggests inhibiting a vend as recited in claim 20.

Nor, as discussed above in connection with claim 8, is there any suggestion in the Walker patent of providing an indication on a display that "insufficient change is available from the machine." Therefore, there is no suggestion that the machine is operable "in these circumstances" (i.e., when the vend is inhibited) "to cause the display means to provide an "insufficient change" indication that insufficient change is available from the machine."

In summary, the subject matter of claim 20 is neither disclosed nor suggested by the Walker patent.

(iv) Claim 25 recites, in part, a vending machine operable to "prevent acceptance of a monetary unit in dependence on the availability of monetary units for dispensing as change" and having display means to provide an indication to a customer "in response to receipt of a monetary unit which is so prevented from being accepted."

There is simply no disclosure or suggestion in the Walker patent that the machine is operable to "prevent acceptance of a monetary unit" as recited in claim 25. Therefore, there also is no suggestion of displaying anything "in response" to receipt of a monetary unit that is so prevented from being accepted. The Office action does not even attempt to point to any disclosure or suggestion of those features in the Walker patent. Therefore, claim 25, as well as dependent claims 27 and 28, is patentably distinguishable from the Walker patent.



(v) Claim 29 recites, in part, a means for providing a “warning indication prior to initiating a transaction . . .”

As disclosed in the Walker patent, the displayed text or graphics informing the customer that an upsell item may be purchased in exchange for a specified amount of change is not a “warning” indication and, in any event, is not provided “prior to initiating a transaction.” The text or graphics display is provided only after the customer has made payment for the intended purchase (*i.e.*, after initiating a transaction). Therefore, claim 29, as well as dependent claims 30-32, is patentably distinguishable from the Walker patent.

#### The Provisional Double Patenting Rejection is Improper

The claims were rejected under a provisional double patenting rejection in view of claims 1-15 of copending application 09/528,255 alone or in combination with either the Morun patent or the Walker patent. As explained below, that provisional rejection is improper.

Each of the claims in the present application recites a display means to provide one or more specific indications. In contrast, none of the claims in co-pending application 09/528,255 recites a display.

The statement in the Office action at pages 7-8 that “the scaling factor described in the claims of the ‘255 patent [application] can be reasonably construed . . . as the functional equivalent of the ‘overpayment amount’ described in the claims of the present application” is simply incorrect. The use of a scaling factor is explained in the ‘255 application as follows:

Monetary values may be transmitted between the controllers in arbitrary units. However, it is necessary that each controller stores information specifying the units being used by the other controller for the information to be meaningful. In practice, both the vend controller and the coin validator controller store a representation of the units, often referred to as a scaling factor. Both controllers transmit value in units determined by this scaling factor.

\* \* \*

As coin validators and vending machines become more sophisticated, and able to handle greater numbers of coins and in some cases different currencies, the

selection of an appropriate scaling factor becomes more difficult. Furthermore, each time the configuration of the coin validator is changed, for example, to allow the validator to accept and/or dispense a different set of coins, the scaling factor potentially becomes inappropriate and needs to be changed.

That has nothing to do with the overpayment amount recited in the claims of the present application. According to an implementation of the present application, a vending machine may be arranged so that a product is vended when the customer has inserted more than the correct price of the product, even when insufficient change is available. The excess amount paid by the customer is the overpay amount. (page 1, lines 17-22) In other words, the overpay amount is the amount by which the correct change may exceed the available change without inhibiting an operation for the vending machine. (page 4, lines 12-15)

This overpay amount may be used to enable a vending machine to accept coins, make change and vend a product while allowing a customer to slightly overpay so that she will still receive the desired item. The apparatus of the present invention does not require that parts of the vending machine store information specifying the units of monetary value being used by another part of the vending machine. Consequently, the applicant respectfully asserts that the overpay amount of the present application cannot be reasonably construed by those ordinarily skilled in the art as the functional equivalent of the scaling factor of the '255 patent application.

Furthermore, as explained above, there are significant distinctions between the Morun and Walker patents, on the one hand, and the claims of the present application on the other hand. Nor does the Office action substantively address how some alleged combination of the claims in application 09/528,255 with either the Morun or Walker patents would render the subject matter of the present claims obvious.

In view of the foregoing remarks, applicant respectfully requests withdrawal of the provisional double patenting rejection.

### Conclusion

In view of the foregoing remarks, applicant respectfully requests reconsideration and withdrawal of the rejections and allowance of all claims.